



## DEPARTMENT OF THE INTERIOR

### INFORMATION SERVICE

FISH AND WILDLIFE SERVICE

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#### STUDY SHOWS FEASIBILITY OF MARKETING RADIATION-PROCESSED FISH

If the shelf-life of fish can be extended through radiation processing, many marketing problems now present in the American fishing industry will be overcome and the fresh fish market would be tremendously expanded. This possibility is suggested by a recently completed study undertaken by the Bureau of Commercial Fisheries, Fish and Wildlife Service, United States Department of the Interior.

The Bureau, under an agreement with the Atomic Energy Commission's Office of Isotopes Development, conducted a study of the feasibility of marketing radiation-processed fishery products.

About 320 producers, processors, distributors, wholesalers, and retailers of fresh, frozen, and cured fishery products as well as home economists, food editors, extension agents, brokers, and restaurateurs, were interviewed by fishery marketing specialists of the Bureau of Commercial Fisheries in the course of the study. Expansion of markets for fishery products and improved quality control were mentioned by those interviewed as the chief advantages of proposed radiation-processing of fishery products. Initial consumer resistance and the cost of an appropriate educational program to overcome that reaction were given as the main disadvantages. The number of comments citing advantages far outnumbered those indicating disadvantages.

It was generally agreed that: (1) radiation processing should be done as close to the production area as possible; (2) the use of a mobile radiation unit to process the output of several firms was declared preferable to a central plant, or in-plant facilities; (3) a cost range of one cent per pound or less at the processor level was considered an acceptable radiation expense; and (4) the processors believed that no expensive modification of their facilities would be needed, but agreed that the established marketing and distribution practices would be considerably affected. Many of those interviewed reported that they were impressed by the prospects of preservation of fishery products through radiation but preferred to withhold final judgment until the results of further research are known.

This survey is one of two studies undertaken by the Bureau of Commercial Fisheries at the request of the Atomic Energy Commission's Office of Isotopes Development. The second study now in progress seeks to determine radiation effects on the nutritive value of fish, particularly its effect upon the 18 essential amino acids which are present in quantity in fish protein.

Ionizing radiation at low dose levels inhibits damage to the food by reducing the number of bacteria. It postpones but does not prevent eventual multiplication of bacteria. Spoilage by microorganisms is often the prime cause of rapid deterioration of perishable foods and while refrigeration is helpful, its extension of storage freshness has definite limitations. Thus, the use of radiation to control bacterial spoilage and extend refrigerated (not frozen) shelf-life of fresh fishery products becomes an important goal.

Copies of the report "Marketing Feasibility Study of Radiation Processed Fishery Products" may be obtained from the Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C., at 75 cents a copy.

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NOTE TO EDITORS AND CORRESPONDENTS: This announcement is being made simultaneously with the Atomic Energy Commission.